

Urban Natural Resources as Capital Assets

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Urban Natural Resources as Capital Assets

- Definitions
- Introduction
- GASB 34
- Urban Forestry & GASB
- Accounting & Trees
- GASB 34 & Trees
- Conclusions



Urban Natural Resources as Capital Assets

- Definitions:
 - Capitalize
 - consider expenditures as assets rather than expenses
 - Capital Assets
 - Roads & Bridges
 - Water & Sewer Systems
 - Buildings

Urban Natural Resources as Capital Assets

- Definitions:
 - Depreciation
 - The rate at which assets are “used up”
 - The amount of the investment which is “expensed” each year of the asset’s life
 - Capital Expenses
 - Expenses that benefit more than one financial period
 - Improvements that extend the useful life or utility of the asset

Urban Natural Resources as Capital Assets

- Introduction:
 - Urban forestry goal
 - improve local programs & increase benefits
 - maintain healthy trees (expand the resource)
 - enumerate value of benefits
 - communicate these values to the public
 - “Green Infrastructure”
 - used by residents
 - as important as gray infrastructure
 - value of service can be determined

Urban Natural Resources as Capital Assets

- Introduction:
 - Valuing nature
 - Daily (Editor) 1997 – Nature's Services
 - Costanza 1997 – Nature (Journal of Science)
 - Biogenic Public Utility
 - Hudson 2000
 - California
 - Trees “subsidize” other utilities

Urban Natural Resources as Capital Assets

- GASB (gas'·bee) 34:
 - Government Accounting Standards Board
 - Accounting practices for infrastructure and capital investments (assets)
 - In the past, gov'ts used cash accounting
 - Now required to use accrual methods
 - Purpose is to report the full cost of providing gov't services and analyze their financial performance

Urban Natural Resources as Capital Assets

- Urban Forestry & GASB 34:
 - Potential benefits to UF programs
 - Programs would become more visible if “value” was on the books
 - Under one GASB approach, there is a requirement for maintaining the asset at a specified condition level
 - This process may result in a higher level of management
 - \ UF may enjoy a more favorable position in the local budget process

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- Accounting & Capital Assets:
 - Asset value is based on cost
 - Example
 - Bridge built for \$10,000,000
 - Useful life is set at 20 years
 - Depreciation \$500,000 per year
 - At end of 10 years, asset value is \$5,000,000
 - Make capital expense of \$2,000,000 in year 10
 - Asset value at year 10 is now \$7,000,000
 - $\text{Value} = \text{Cost} - \text{Depreciation} + \text{Capital Expenses}$

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- Accounting & Trees:
 - Extending this analogy to trees
 - Cost of installing the “infrastructure” is low
 - The “infrastructure”, in most cases appreciates in value (i.e. it grows)
 - “negative depreciation” is not an accounting term
 - Even if trees are considered assets, tree maintenance may not be a capital expense

Urban Natural Resources as Capital Assets

- Accounting & Trees:
 - Example
 - 2" caliper tree planted for \$380
 - Useful life is set at 40 years
 - Make an argument for 0 depreciation
 - At end of 10 years, asset value is \$380
 - Make capital expenses annually (e.g. water, prune, mulch, fertilize)
 - Asset value at year 10 may be \$645
 - Improvements that extend the useful life

Urban Natural Resources as Capital Assets

- Accounting & Trees:
 - Cost, less depreciation methodology
 - even with capital expenses
 - will not result in “value” from current models
 - At planting, a 2” caliper tree
 - minimal environmental services value
 - as it grows, the value of services increases
 - Value based on “environmental services”

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- GASB 34, another approach:
 - To avoid “cost, less depreciation”
 - Modified Approach - Asset Management
 - assess the physical condition of the asset
 - describe the criteria used for this assessment
 - identify the target condition level desired
 - report actual expenses with estimated expenses needed to maintain the asset

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- Asset Management (Trees)
 - Intensive level of management
 - periodic tree inventory
 - use standardized condition rating methods
 - maintain at desired condition level
 - report results (management plan)

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- As improvements to other assets
 - Hudson (California)
 - Support for other infrastructure
 - Improvements that extend the useful life
 - Examples:
 - shade parking lots to extend pavement life
 - watershed riparian zones reduce sediment to reservoirs
 - as Phase II stormwater enhancements
 - Support for urban forestry program

Urban Natural Resources as Capital Assets

- GASB 34 & Trees:
 - 3 ways that trees can fit into GASB 34
 - As a capital asset, with capital expenses
 - Under the modified approach
 - assess physical condition of the asset
 - describe the criteria used to measure condition
 - identify the desired condition level
 - compare estimated expenses with actual
 - As improvements to other assets
 - capital expenses

Urban Natural Resources as Capital Assets

- To Incorporate Trees into GASB 34:
 - Must continue to make the case for trees as a capital asset
 - “green infrastructure”
 - Document that tree care extends the life of the asset
 - Pursue depreciation/appreciation issues

Urban Natural Resources as Capital Assets

- To Incorporate Trees into GASB 34:
 - Continue to research & demonstrate that trees can extend the useful life of other assets
 - Develop or adopt a standard for tree condition (ISA, ANSI)
 - Develop or formalize an asset management program for urban forests that meets GASB 34 standards

Urban Natural Resources as Capital Assets

- **Conclusions:**
 - Trees do not “fit” easily into current accounting practices
 - The asset value of trees is not the “value” of the environmental service provided
 - There are at least 2 opportunities where trees can be treated as assets under GASB 34 that may be beneficial to local UF programs
 - Continued research, field implementation of that research, and development of standards are needed to support trees as productive assets